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- (71) Applicant (for all designated States except US): **NEW YORK UNIVERSITY** [US/US]; 70 Washington Square South, New York, New York 10012 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **CHANG, Young-Tae** [KR/US]; c/o New York University, 70 Washington Square South, New York, New York 10012 (US).
- (74) Agents: **BROWDY AND NEIMARK, P.L.L.C.?** et al.; 624 Ninth Street N.W./Suite 300, Washington, District of Columbia 20001-5303 (US).
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(54) Title: **RECEPTOR SPECIFIC BINDER DISCOVERY USING INTRAMOLECULAR ACYL MIGRATION INDUCED DYNAMIC CARBOHYDRATE LIBRARY**

(57) Abstract: An efficient molecular evolution system was obtained by combining two novel approaches in the field, intramolecular acyl migration for DCL generation and boronic acid as a selector. 1,4-Di-O-benzoyl chiro-inositol in acetonitrile with DBU as a base generated a reversible equilibrium of 9 regioisomers. Only 3,4-di-O-benzoyl chiro-inositol, containing two sets of cis-diols, is most favored toward binding with phenyl boronic acid, and its percentage of the DCL composition was amplified by up to 82%.



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